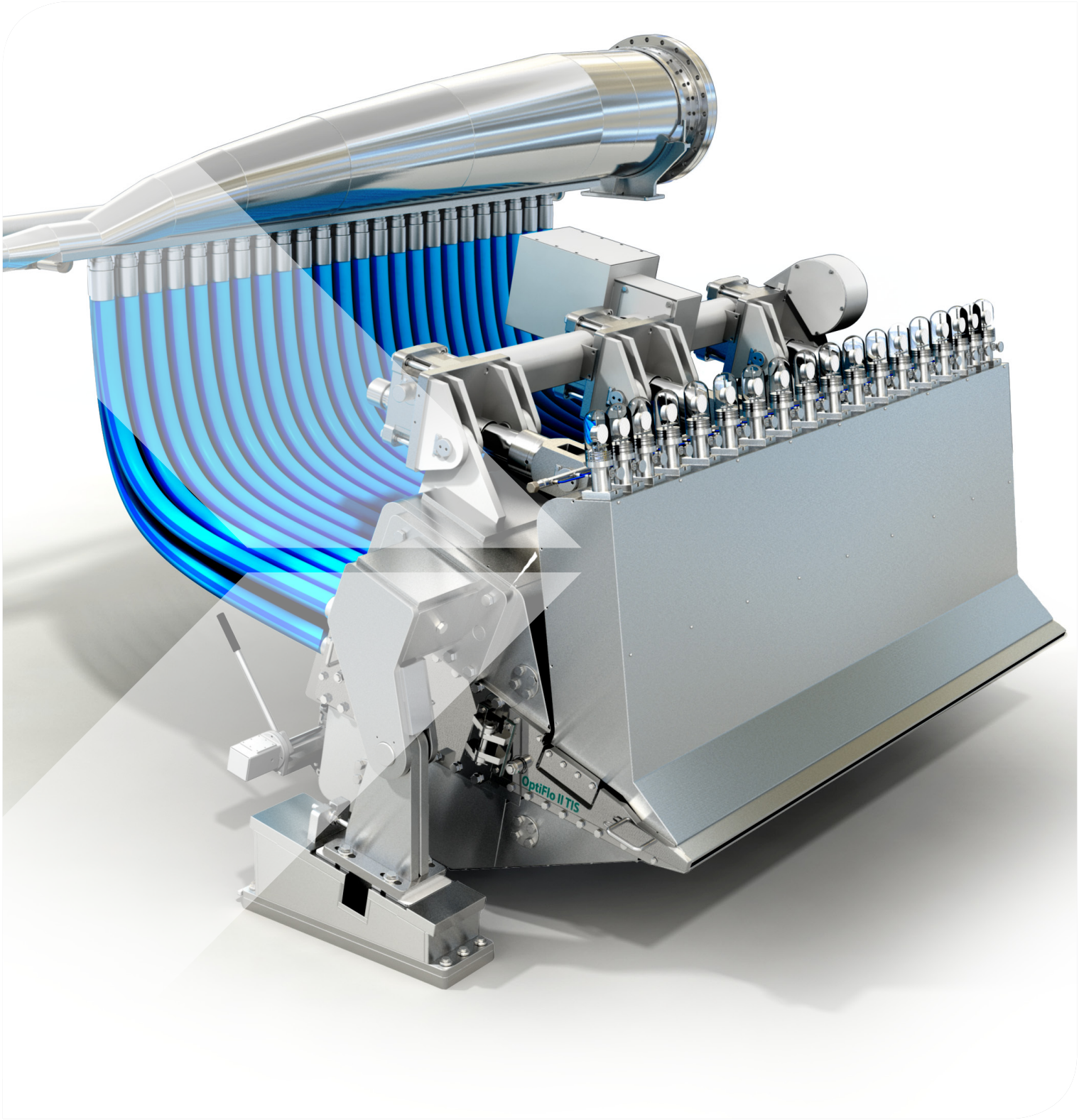
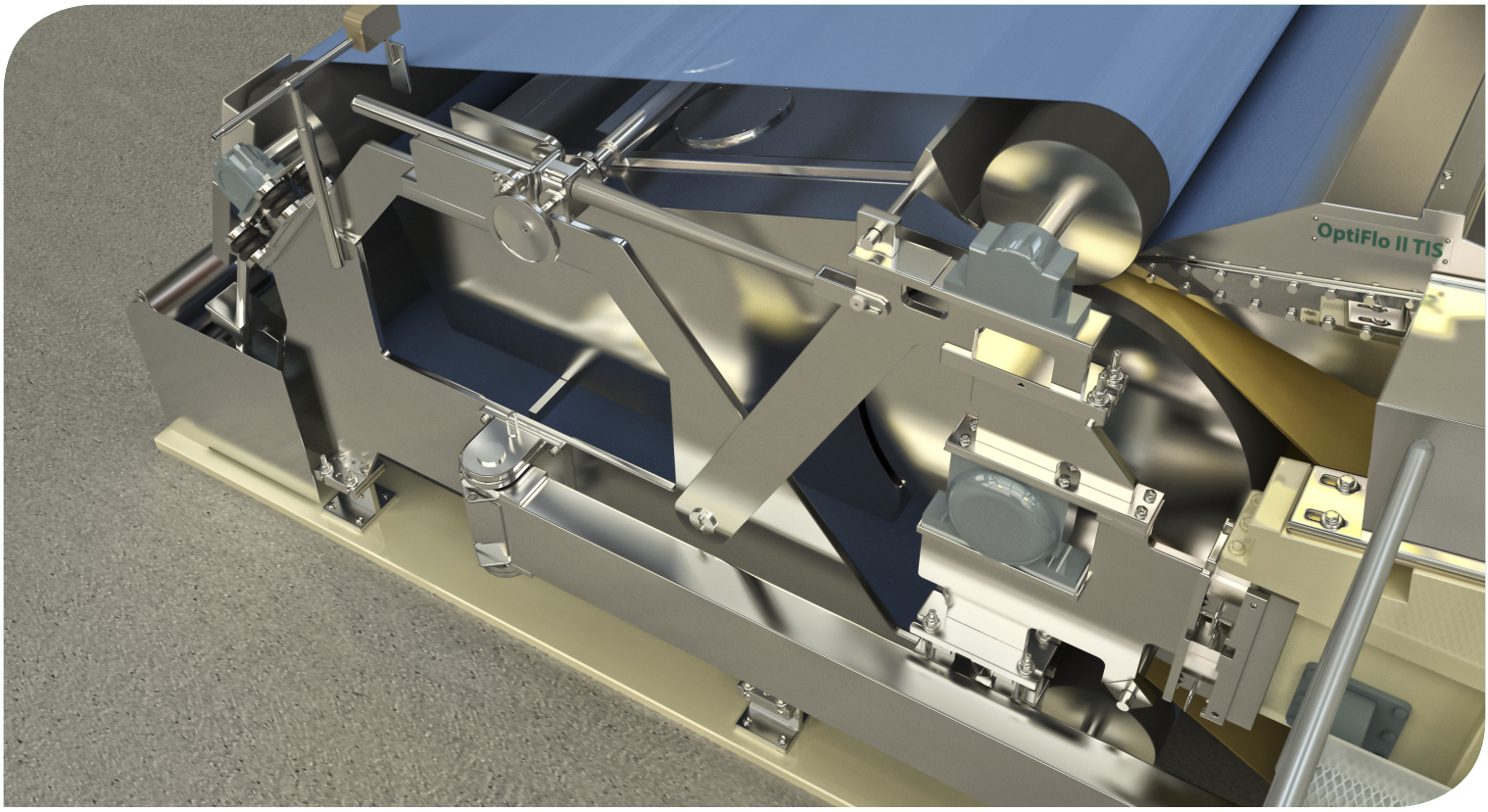
OptiFlo II TIS

The headbox designed to boost productivity





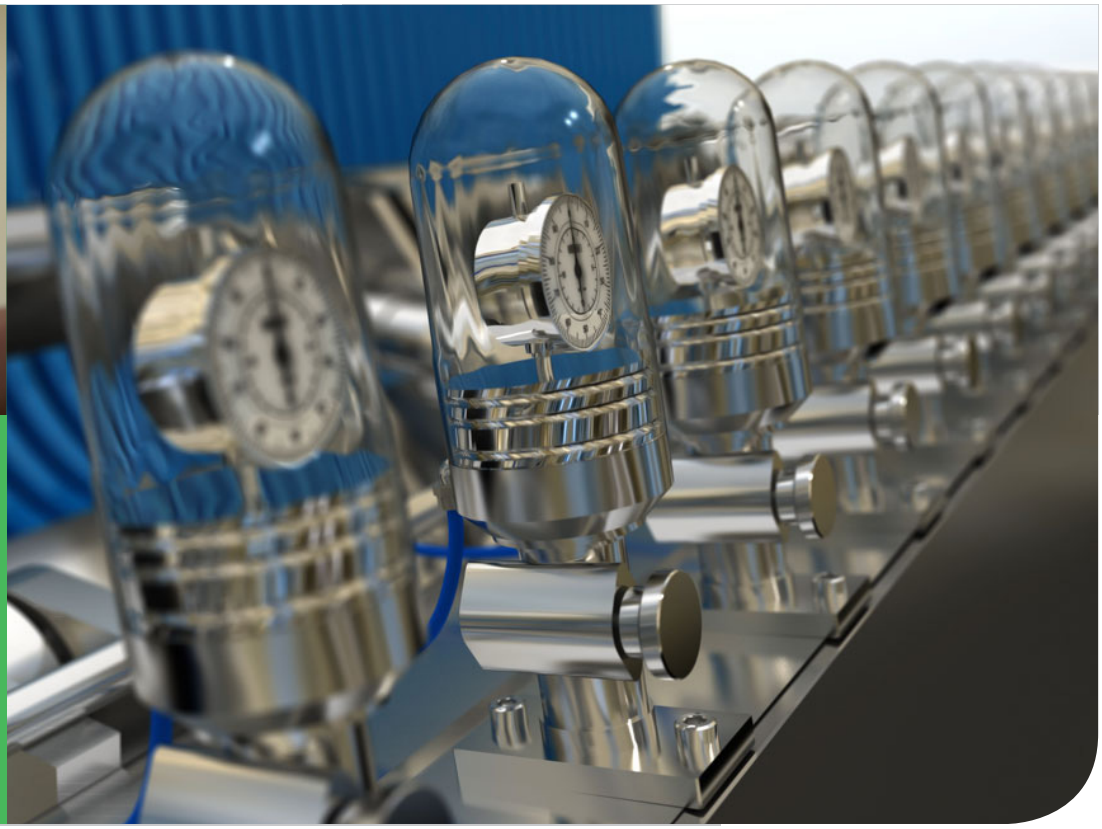
Tissue making starts in the headbox

One of the most critical components on a tissue machine is the headbox. A properly functioning headbox enhances tissue makers' ability to produce various tissue grades at their desired level of quality. Tissue making starts in the headbox.

Optimal formation and basis weight profiling

Valmet guarantees optimal formation and CD basis weight profiles in all of the OptiFlo II TIS headboxes in their product range to provide tissue makers with

- Real operational and quality improvements
- The option of low or high consistencies into the headbox, low for production of top-of-the-line grades, or high consistencies to reduce energy consumption, a choice that minimizes pumping energy
- Superior base paper properties
- Uniform fiber distribution, a necessity for gaining tensile efficiency
- Greater opportunity to satisfy consumers' esthetic requirements for tissues such as touch, softness and appearance
- Capability of producing within a wide range of basis weights
- Excellent layering capability giving tissue makers the opportunity to put bulk and softness where they want it
- The option of profiling with automatic dillution system
- The option of one, two and three layer applications



- Best possible formation
- Lower electric energy consumtion
- Improve basis weight profiles
- Excellent layering, profiling and jet setting capabilities

New or rebuild - it's all about efficient performance

The OptiFlo II TIS headbox is standard on all Valmet Advantage DCT®, NTT® and ThruAir® (TAD) tissue machines. A number of different models are available, each corresponding to customers' requirements for machine widths and speeds.

Each model of the OptiFlo II TIS headbox provides tissue makers with the same outstanding end-product properties.

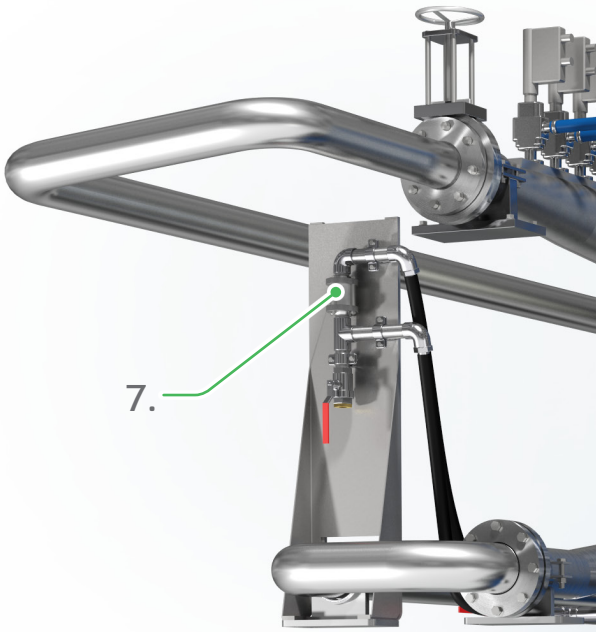
The compact and flexible design of the OptiFlo II TIS headbox makes cost-effective upgrading and rebuilding of existing tissue machines a real possibility.

The OptiFlo II TIS headbox ensures the stable tissue making performance necessary for efficient tissue production.

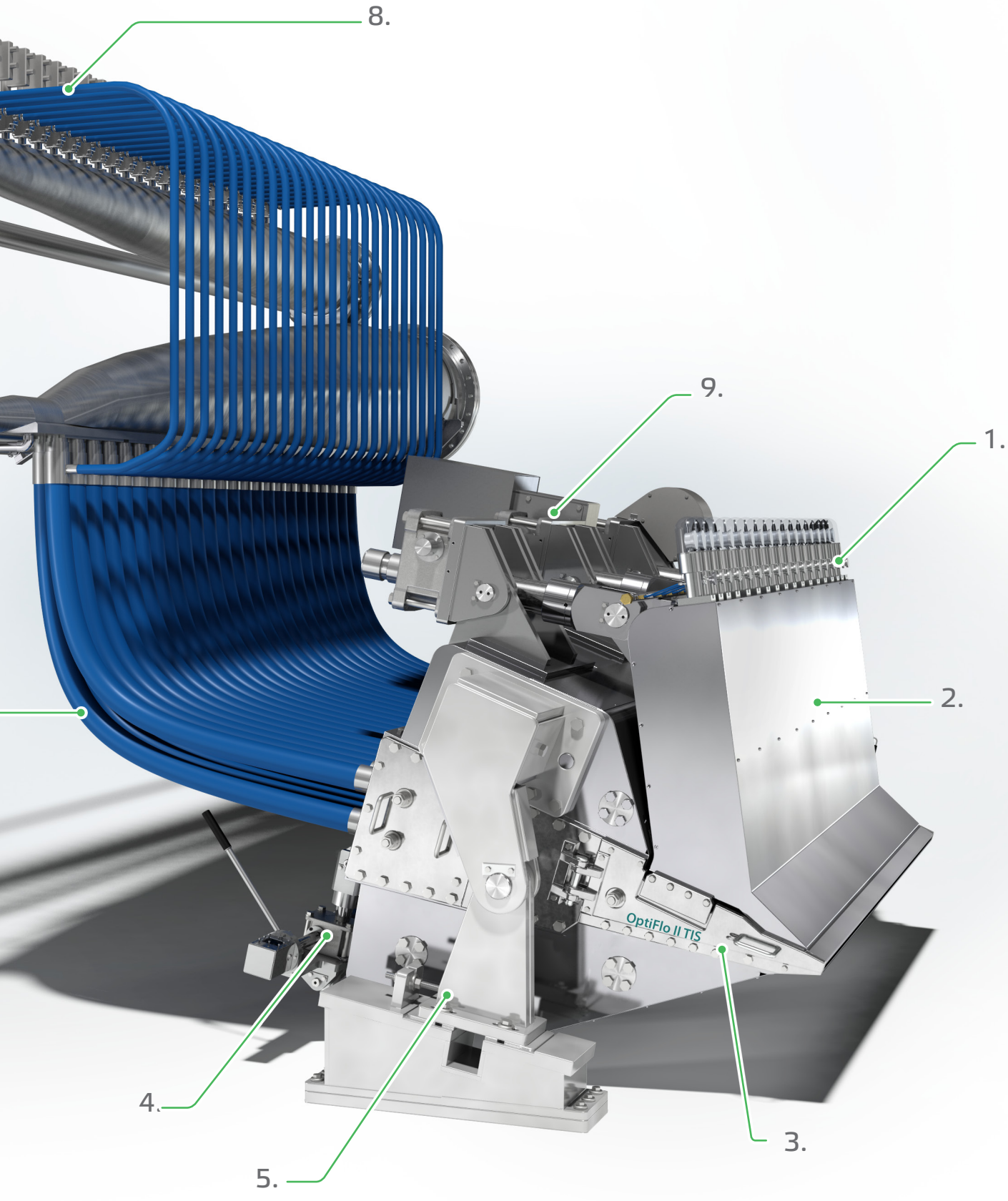
OptiFlo II TIS

Features designed with

1. Easily accessible micro adjusters in stainless steel with easily read slice indicators give excellent basis weight profile.
2. The clean design and smooth exterior surface means no fiber buildup.
3. The hinged pond side doors enhance easy inspection and cleaning.
4. The screw jack enables adjusting the impingement angle during operation.
5. Flexible mounting allows moving the headbox laterally and vertically to facilitate easy fine-tuning of the position of the headbox.
6. Long life flexible hoses connect the stand-alone headers to the headbox for optimum flexibility, and they simplify pipe connecting as well. Flexible hoses also ease adjustment of headbox position and increase rebuild options where space is limited.
7. The header-balancing unit fitted with an observation window enhances adjusting the pressure balance in the header.
8. The option dilution system automatically and continuously adjusts basis weight profiling.
9. The remote controlled slice opening adjustment facilitates changing of grades. An indicator provides easily read slice-opening data.



productivity in mind



OptiFlo II Tis

Designed for quality and productivity

Optimum production costs and products and production capacities matched to current market demands are essential for tissue makers to achieve the best levels of productivity.

Formation and basis weight profiles

OptiFlo II TIS headboxes are designed for optimal formation. They also show excellent layering, profiling and jet setting capabilities.

In order to achieve this we have focused on the behavior and physics of the flow of fiber in a suspension. In particular the de-flocculation and re-flocculation processes.

An optimized turbulence generator and a nozzle geometry in the area before the slice creates a highly de-flocculated and uniform fiber suspension into the wire gap to enable the best possible formation.

Low energy consumption

Another target, no less important than the above , is reducing energy consumption. An OptiFlo II TIS headbox can lower your levels of energy consumption, without sacrificing good formation and CD basis weight profiles. The design provides energy savings due to reduced flow to the headbox. This means decreased pumping energy, and the pump is one of the most electric energy consuming items in the tissue mill.

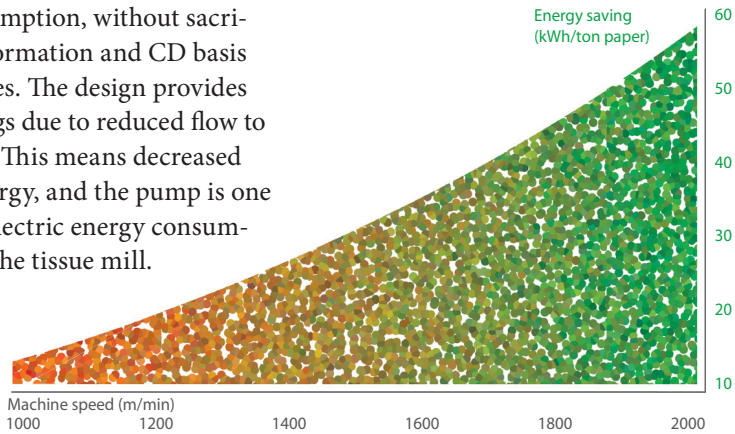
Low production costs

Uniform formation, CD basis weight and moisture profiles, in other words, optimum uniformity of the essential properties in the tissue making process, positively impact machine runnability, efficient use of fibers, water and steam consumption and maintenance requirements.

Uniformity throughout the tissue making process increases tissue makers' possibility of hitting their production and quality targets without overcompensating for variation.

Tensile efficiency saves refining energy.

OptiFlo II TIS headboxes give tissue makers the option of high or low consistencies into the headbox: high consistencies to reduce energy consumption, a result of minimized pumping, or low consistencies for production of top-of-the-line grades. The compact and simple design of the OptiFlo II TIS headbox simplifies maintenance, and its high turbulence factor minimizes cleaning requirements.



Products and capacaties matched to market demands

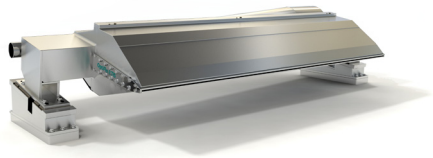
The wide range of basis weights, running speeds and layer configurations that the OptiFlo II TIS headbox offers tissue makers, enables the option of developing products for a wide range of end-users. And the OptiFlo II TIS headbox has no trouble meeting the current trend calling for production at very low basis weights.

The wide range of Valmet tissue machines is available in a number of widths and they run at speeds of up to 2200 m/min or 7200 ft/min to meet tissue makers' capacity specifications.

The OptiFlo II TIS headbox is standard for all Valmet Advantage™ DCT®, NTT® and ThruAir® (TAD) tissue machines.

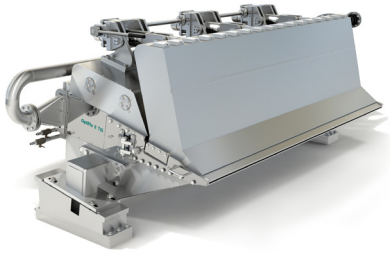
OptiFlo II TIS

One headbox for every need



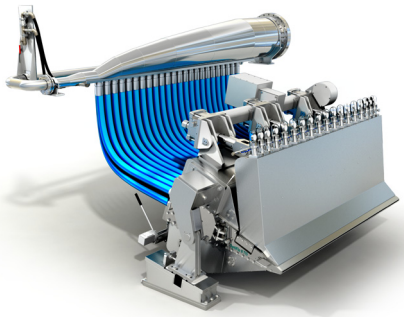
OptiFlo II TIS 1300

Design speed: 1300 m/min
Concepts: Advantage DCT®
Layers: 1



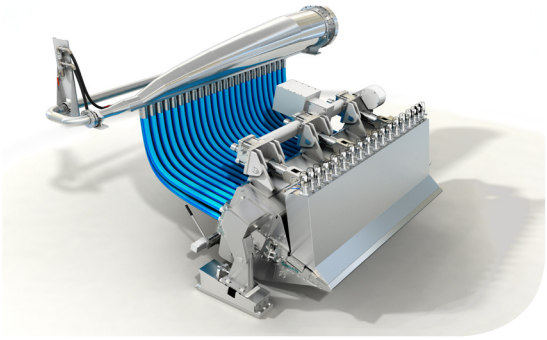
OptiFlo II TIS 1600

Design speed: 1600 m/min
Concepts: Advantage DCT® & ThruAir® (TAD)
Layers: 1-3



OptiFlo II TIS 1800

Design speed: 1800 m/min
Concepts: Advantage Advantage DCT®, NTT® and ThruAir® (TAD) & replacement
Layers: 1-3



OptiFlo II TIS 2200

Design speed: 2200 m/min
Concepts: Advantage DCT®, NTT® and ThruAir® (TAD) & replacement
Layers: 1-3

OptiFlo II TIS References

- HengLi, China
- Delipapier, Germany
- Lila Kagit, Turkey
- Ibertissue, Spain
- Al Snobar, Jordan
- Augusta Mill, USA
- Georgia Pacific, USA
- Syktyvar, Russia
- Hengan, China
- Saudi Paper, Saudi Arabia
- Gold Door Co., China
- Century, India
- Mätsä Tissue, Sweden
- Cellynne, USA
- San Fransisco, Mexico
- Wasau, USA
- Santher, Brasil
- SCA, Mexico
- Hayat Kimya, Turkey
- Garven Sanitary Products, China
- Tül Kagit, Turkey
- Industrie Cartarie Tronchetti, Italy
- Shanghai Orient Champion, China
- Xiamen Xinyang Paper, China
- Xingzhilian, Chile
- Jeesr Industries, Marocco
- CMPC Tissue S.A., Chile
- Ehime, Japan
- PT Suparma, Indonesia
- Hayat Kimya, Russia
- and many more...

The global leader in tissue making

Over 150 years of experience within the pulp and paper industry has resulted in Valmet becoming the global leader in tissue making. We deliver the most production capacity with the largest installed base of tissue making machines worldwide. We strive to ensure that tissue quality, knowledge and process technology, as well as our wide scope of service, continue to drive mutual success.

Join us to become Best in Tissue!

Contact us

Valmet AB, Karlstad, Sweden
Tel.: +46 54 171 000

Valmet S.p.A, Gorizia, Italy
Tel.: +39 0481 528 311

Valmet Inc, Biddeford, USA
Tel.: +1 207 282 1521

Valmet Inc., Norcross, USA
Tel.: +1 770 263 7863

Valmet Ltd., Beijing, China
Tel.: +86 1065 6666 00

e-mail:
tissue.info@valmet.com

www.valmet.com

Specifications in this document are subject to change without notice. Product names in this publication are all trademarks of Valmet Corporation.

© Valmet Corporation, TIS_C47005. 2014.